



2051

# **THYRATRON** **GAS-TETRODE**

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Heater*	Unipotential Cathode	
Voltage	6.3	a-c or d-c volts
Current	0.6	amp.
Direct Interelectrode Capacitances: <sup>o</sup>		
Control Grid to Anode	0.26	μf
Input	4.2	μf
Output	3.6	μf
Tube Voltage Drop (Approx.):	8	volts
Control Ratio at Breakdown (Approx.):		
Control Grid to Anode (Shield-Grid Volts=0)	250	
Shield Grid to Anode (Control-Grid Volts=0)	800	
Maximum Overall Length		4-1/8"
Maximum Seated Height		3-9/16"
Maximum Diameter		1-9/16"
Bulb		ST-12
Base		Small Shell Octal 8-Pin
Pin 1 - No Connection		Pin 6 - Shield Grid
Pin 2 - Heater		Pin 7 - Heater
Pin 3 - Anode		Pin 8 - Cathode
Pin 4 - No Connection		• - Gas Tube
Pin 5 - Control Grid		
Mounting Position		Any

BOTTOM VIEW

Maximum Ratings Are Absolute Values

## **MAXIMUM RATINGS and TYPICAL OPERATING CONDITIONS**

Peak Forward Anode Voltage	350 max. volts
Peak Inverse Anode Voltage	700 max. volts
Shield-Grid (Grid No. 2) Voltage	-100 max. volts
Control-Grid (Grid No. 1) Voltage	-100 max. volts
Peak Heater-Cathode Potential:	
Heater negative with respect to cathode	100 max. volts
Heater positive with respect to cathode	25 max. volts
Peak Cathode Current	375 max. ma.
Average Cathode Current	75 max. ma.
Control-Grid Circuit Resistance	10 max. megohms
Ambient Temperature Range	-55 to +90 °C
Typical Operation in Relay Service:	
Anode Voltage (RMS)*	220 volts
Shield-Grid Voltage	0 volts
Control-Grid Bias Voltage (RMS)■	4 volts
Control-Grid Signal Voltage (Peak)	4 volts
Control-Grid Circuit Resistance	1 megohm
Anode Circuit Resistance□	2000 ohms

\* Heater voltage must not deviate more than 10% from the rated value, and must be applied at least 10 seconds before the application of anode voltage.

o with no external shield.

\*\*For an averaging period of 30 seconds.

■ Approximately 180° out of phase with the anode voltage.

□ Sufficient resistance, including the tube load, must be used under any conditions of operation to prevent exceeding the current ratings.

APRIL 1, 1944

RCA VICTOR DIVISION  
 RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

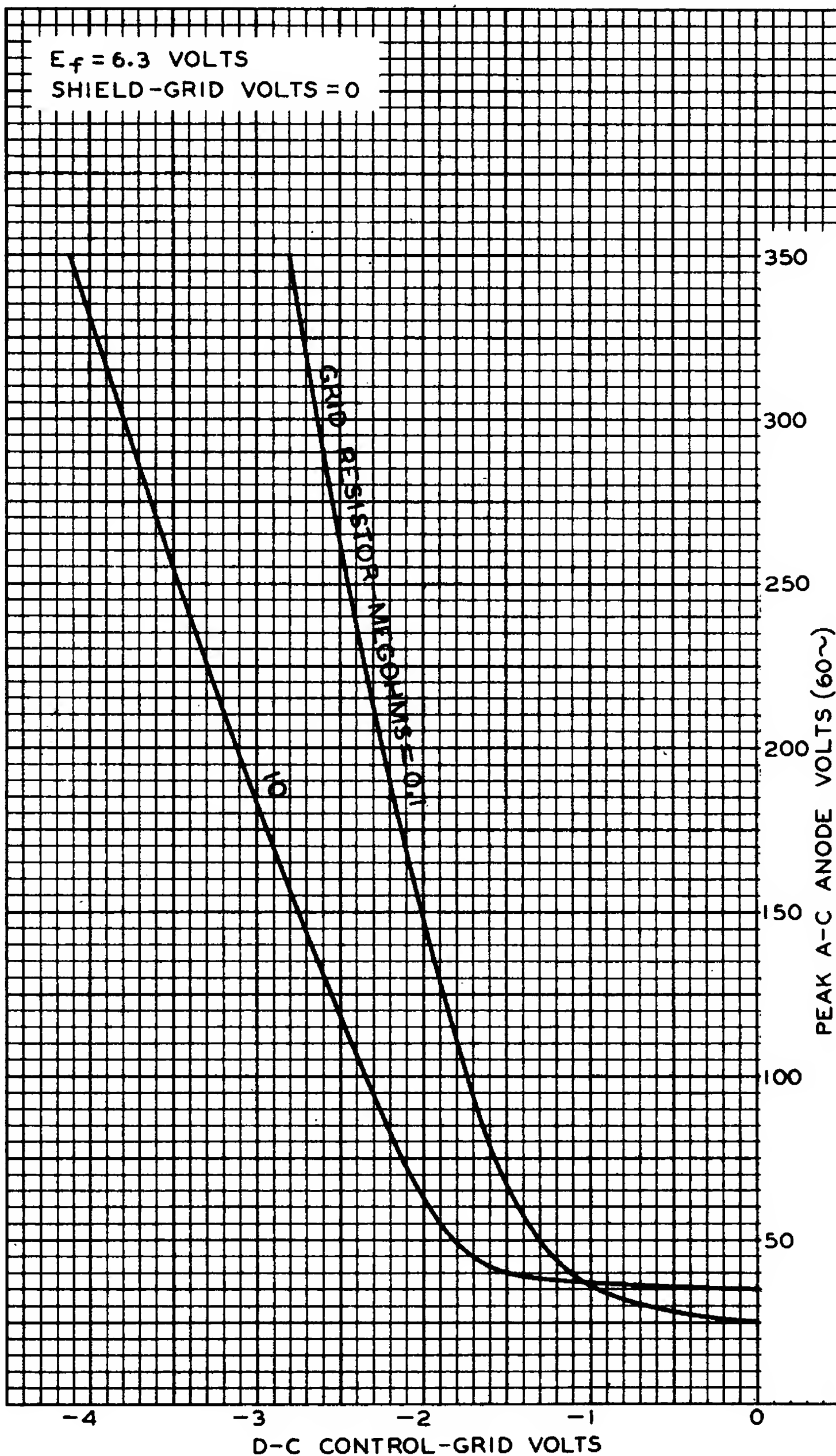
DATA

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# AVERAGE CONTROL CHARACTERISTICS



FEB. 15, 1944

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